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| 10/814,539 | 03/31/2004 | David M. Callaghan | 03AB111/ALBRP333US | 7412 |
| 7590 Susan M. Donahue Rockwell Automation 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204 | | | | |
| 07/28/2008 | | | | |
| EXAMINER | | | | |
| KANE, CORDELLA P | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,539

Applicant(s)

CALLAGHAN, DAVID M.

Examiner

CORDELIA KANE

Art Unit

2132

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 30-41 is/are pending in the application.
- 4a) Of the above claim(s) 12-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 30-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 9, 2008 have been fully considered but they are not persuasive. Applicant argues that Stefik fails to teach or disclose a certification component or an access component. However, Stefik teaches a Master repository that issues identification certificates (column 51, lines 9-13, column 13, lines 13-15). Stefik also teaches a repository that defines core functionality in support of usage rights (column 51, lines 39-43). Stefik goes on to explain how the repository requires a digital certificate to be able to gain access to a piece of work (column 7, lines 20-24).

Election/Restrictions

2. Applicant's election of claims 1 – 11 and 30 – 41 in the reply filed on December 18, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). The initial acknowledgement of timely traversal was incorrect as the traverse failed to distinctly and specifically point out the supposed errors in the restriction requirement.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 1 – 8, 11, 30, 31, 34 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Stefik et al's US Patent 6,959,290 B2. Referring to claim 1, Stefik teaches:
- a. A certification component that generates certificates for local domain automation devices (column 51, lines 9-13).
 - b. An access component that establishes rules of use for automation device services based at least upon the identity of a user or entity as provided by a certificate (column 51, lines 39-43).
5. Referring to claim 2, Stefik teaches that the system is executed remote from the automation device (column 41, lines 23-24).
6. Referring to claim 3, Stefik teaches that the communication occurs over a LAN (column 14, lines 50-51).
7. Referring to claim 4, Stefik teaches that the communications are secured using digital certificates which bind public keys to specific entities to facilitate decryption of messages as well as authentication of the sender (column 51, lines 5-8).
8. Referring to claim 5, Stefik teaches that the message is digitally signed to enable the message to be authenticated (column 51, lines 5-8).
9. Referring to claim 6, Stefik teaches that access to the access component is restricted to a particular user or group of users via certificates (column 12, lines 33-36).
10. Referring to claim 7, Stefik teaches that the devices includes an access credential component which defines and restricts access to particular objects and

services based on the identity of the user as established by the certificate (column 7, lines 20-24).

11. Referring to claim 8, Stefik teaches a virtual key component adapted to retrieve identifying information from a certificate (column 26, lines 35-38).

12. Referring to claim 11, Stefik teaches that the automation device includes an I/O device (column 7, lines 55-57).

13. Referring to claim 30, Stefik teaches:

c. Encrypting a message to be sent to a automation device utilizing a key (column 27, lines 7-9) derived from a certification component (column 27, lines 8-9).

d. Transmitting the encrypted message to the automation device (column 27, lines 19-20).

14. Referring to claims 31 and 36, Stefik teaches:

e. Receiving an encrypted message from an automation device or device controller (column 27, line 21).

f. Locating a certificate component associated with the automation device sending the message (column 27, lines 21-23).

g. Decrypting the message utilizing the public key provided by the certificate component (column 27, lines 26-27).

15. Referring to claim 34, Stefik teaches searching the local device store (column 27, lines 21-23).

Claim Rejections - 35 USC § 103

16. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik as applied to claims 1 and 7 above, and further in view of Asunmaa.

17. Stefik discloses all the limitations of the parent claims, using a key component to retrieve identifying information (column 26, lines 35-38), and embedding the repository in a card (column 16, lines 2-3). Stefik does not explicitly disclose the card being a SIM card. However, Asunmaa discloses using a SIM card to authenticate a user (page 4, paragraph 59). Stefik and Asunmaa are analogous art because they are from the same field of endeavor, authentication. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Stefik and Asunmaa before him or her, to modify the card of Stefik to include the SIM card of Asunmaa. The suggestion/motivation for doing so would have been to have reliable authentication of a data terminal (page 4, paragraph 59).

18. Claims 32, 33 and 37 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik as applied to claims 30 and 31 above, and further in view of Forth.

19. Referring to claim 32, Stefik discloses all the limitations of the parent claims. Stefik does not explicitly disclose that the automation device is an industrial PLC. However, Forth discloses using an industrial PLC to store instructions to perform I/O control (page 2, paragraph 25). Stefik and Forth are analogous art because they are from the field of Endeavor, input/output. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Stefik and Forth before

him or her, to modify the input/output system of Stefik to include the industrial PLC of Forth. The suggestion/motivation for doing so would have been to provide increased versatility and additional functionality (page 2, paragraph 22).

20. Referring to claim 33, Stefik discloses that the message is a program (column 42, lines 17-18).

21. Referring to claims 37 and 41, Stefik discloses:

h. Generating a digitally signed message component comprising a message, a message digest, a certification component, and hash function data, wherein the message component is generated by a first industrial automation device (column 42, lines 11-20).

i. Transmitting the message component to a second industrial automation device (column 42, lines 11-12). For the requestor to receive the message, another requestor would had to have transmitted it.

22. Stefik does not explicitly disclose that the automation device is industrial.

However, Forth discloses using an industrial PLC to store instructions to perform I/O control (page 2, paragraph 25). Stefik and Forth are analogous art because they are from the field of Endeavor, input/output. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Stefik and Forth before him or her, to modify the input/output system of Stefik to include the industrial PLC of Forth. The suggestion/motivation for doing so would have been to provide increased versatility and additional functionality (page 2, paragraph 22).

23. Referring to claims 38 and 39, Stefik discloses encrypting the message prior to transmission (column 42, lines 11-16).
24. Referring to claim 40, Stefik discloses authenticating the message by retrieving a hash function in accordance with the hash information (column 42, lines 11-15), generating a message digest by applying the retrieved hash function to the received message and comparing the generated message digest with the message digest retrieved from the message component (column 42, lines 17-20).
25. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik as applied to claims 30 and 31 above, and further in view of Meffert.
26. Stefik does not explicitly disclose downloading the certificate. However, Meffert discloses downloading the certificate and private keys (page 11, paragraph 109). Stefik and Meffert are analogous art because they are from the same field of endeavor, digital rights management. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Stefik and Meffert before him or her, to modify receiving the certificate of Stefik to include downloading the certificate of Meffert. The suggestion/motivation for doing so would have been to be able to identify the rights set and match the certificate to the private key (page 11, paragraph 109).

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2132

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/C. K./

Examiner, Art Unit 2132

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2132